

Ghana Team



Skin bleaching in Africa...a public health problem

Rationale

Skin bleaching in Africa is not a new beauty phenomenon. The practice has its roots in the transatlantic slave trade and continued during the European colonization of African nations. Skin bleaching and the use of hazardous and potent substances have been linked to a range of adverse effects, from skin diseases to serious systemic problems such as diabetes, hypertension and renal diseases. Skin bleaching has become a public health concern, even though the importation and marketing of skin-bleaching products are banned or strictly regulated in many countries. Africans continue to bleach their skin despite the known risk of negative side effects. According to reports, skin bleaching for cosmetic purposes is most widespread in African women. This fact sheet provides the status of skin bleaching in Africa.

Key messages

- A meta-analysis found that the global lifetime prevalence of skin bleaching use was 27.1% in Africa.
- In African countries, around 25–80% of women regularly use skin-whitening products.
- In Africa, the prevalence varies significantly, ranging from 25% in Mali to 77% in Nigeria, with other countries reporting intermediate rates: 31.15% in Zimbabwe, 32% in South Africa, 39% in Ghana, 50% in Senegal and 66% in Congo-Brazzaville.
- Skin bleaching is a global public health problem that needs urgent attention.
- Strong regulatory actions are required to ban harmful skin-bleaching products importing into countries.

What is skin bleaching

Skin-bleaching, also known as skin lightening, skin toning, and skin whitening, is a global cosmetic practice to achieve a lighter skin tone. It is often driven by cosmetic desires rooted in deep historical, economic, socio-cultural, and psychosocial factors.

It involves the use of topical products containing corticosteroids, hydroquinone, mercury, or other agents to lighten the skin. The use of potentially harmful agents such as mercury, is common in Africa and Asia.

A recent meta-analysis revealed a global prevalence of skin bleaching of **27.1% in Africa**. This finding underscores the urgent need for epidemiological studies in under-represented regions and highlights the serious global public health concern associated with skin-bleaching practices. The followings are key points needing more research studies:

- **Understanding the potential risks associated** with skin-bleaching doesn't stop people from engaging in this behaviour, as their current psychological motivation outweigh the perceived risks.
- **The motivations behind skin-bleaching** are diverse, with respondents expressing a desire to appear important, look attractive, enjoy their lighter skin, and follow fashion trends.
- **These motives underline the deep psychological roots** of skin-bleaching, suggesting that it serves to cope with psychological needs and desires.

Women who underwent skin bleaching described several reasons in the studies:

- **Smooth and Healthy Skin:** Approximately **49.38%** of women use skin bleaching to possess smooth and healthy skin.
- **Beauty Enhancement:** Around **30.86%** cite the desire to look beautiful as a motivating factor for skin bleaching.
- **Social Favours:** The remaining participants (around **20%**) reported seeking social benefits, including improved marriage prospects and better job opportunities.

Prevalence

Data from meta-analysis and meta-regression analysis of 68 studies showed that: People aged 30 years and under had the highest prevalence of skin bleaching at **55.9%**, followed by those aged 31-49 years at **25.9%**.

Prevalence of skin-bleaching in selected countries

In Africa, the prevalence varies significantly, ranging from 25% in Mali to 77% in Nigeria, with other countries reporting intermediate rates: 32% in South Africa, 39% in Ghana, 50% in Senegal and 66% in Congo-Brazzaville.

In addition, the prevalence of skin bleaching among women in Zimbabwe is 31.15%. These statistics highlight the widespread use of skin-lightening products across the continent and show the varying degrees of engagement in skin-bleaching practices in different African regions.

In Ghana, data showed that 40.4% of study participants in Kumasi and 50.3% in Accra reported either current or past use of skin-bleaching products.

- Mali: 25%
- Nigeria: 77%
- South Africa: 32%
- Ghana: 39%
- Senegal: 50%
- Congo-Brazzaville: 66%
- Zimbabwe: 31.15%

Among Basotho women in Lesotho, those under 30 years were less likely to use skin lightening products (SLPs) than older women. Moreover, women who didn't consider themselves poor were also less likely to use SLPs than those who considered themselves poor.

Skin lightening products (SLPs)

In a cross-sectional study in Borama, Somaliland, led to the following conclusions:

Where Products Are Purchased: The majority (73.8%) of respondents buy SLP from supermarkets. Around 12.3% of purchases come from cosmetic stores, 6.2% from convenience stores, and another 6.2% from pharmacies.

Influence on Product Choice: 34.8% choose the SLP based on advice from friends. Comparatively fewer users seek advice from cosmetic stores, pharmacists or doctors.

Reasons for Using SLP: 51.6% of users use for pigment disorders like melasma, while 38.7% expressed a preference for a lighter skin colour. Additionally, 9.7% reported both reasons for using SLP.

Product Usage Patterns: Most participants use only one SL product at a time, but a notable 35.9% reported using two or more SL products at the same time.

Knowledge of Active Ingredients: Surprisingly, the majority (61.7%) of SLP users were unsure about the active ingredients in their products.

Reported Active Ingredients: Among those who were aware, the active ingredients reported were clobetasol, betamethasone, vitamin C, hydrogen peroxide, alpha-hydroxy acids, aleosin, tretinoin, vitamin A, calomel, ammoniated mercuric chloride and sunscreen.

Other products containing caustic substances, glycolic or fruit acids, herbal derivatives, kojic acid, vitamins (e.g., A and C), and products of unknown composition were used in 32.7% of cases. The use of these alternative substances together with conventional bleaching agents have potentially dangerous consequences for the skin.

Among Basotho community in Lesotho, occupation and marital status are factors associated with the use of SLP. They played a significant role in the use of these products, as they believe that lighter skin is superior and tend to ignore the risks. In details :

- **Occupation and SLP Use:** Female factory workers were almost three times as likely (2.91 times) to use SLPs compared to professional women.
- **Marital Status Impact:** 2.37 times more likely to use SLP among divorcees and widowers than among single women.

A meta-analysis study found that the most used ingredients in SLP are :

- Topical corticosteroids (TCs) at 51.8%.
- Mercurials (mercury and its derivatives) at 34.4%.

In a study conducted by the 2018 Zero Mercury Working Group in collaboration with the Biodiversity Research Institute, they examined over 300 skin lightening products from 22 different countries. The findings showed that roughly **10% of these creams surpassed the authorized limit for mercury content**. Alarmingly, some of these products contained levels of mercury that were **up to 100 times higher** than the authorised amount.

Effect on Health

Adverse effects - Skin bleaching has been associated with several adverse health effects such as dermatitis, steroid acne, discolouration, changes in skin thickness, inflammatory disorders, and conditions such as mercury poisoning, nephrotic syndrome and exogenous ochronosis. These health problems are associated with ingredients like hydroquinone, corticosteroids, and mercury in SLP. A history of long-term use of SLP is found in patients with skin cancers such as squamous cell carcinoma.

Systemic Health Risks - In addition to skin problems, chronic use of SLP is associated with symptoms of mercury poisoning, nephrotic syndrome, adrenal insufficiency, Cushing's syndrome, diabetes mellitus, osteonecrosis of the femoral head and life-threatening postoperative adrenal crisis.

Wound Healing - studies have shown that people with bleached skin have slower wound healing due to thinner skin layers, delayed skin regrowth, reduced tissue support and impaired tissue formation. It increases the likelihood of wound infection, dehiscence (reopening of the wound), and bleeding. It is similar to wound healing complications caused by the use of steroids.

Action with Melanin - SLP reduces the presence of melanin (a pigment responsible for skin colour), protecting the skin from UV light. When melanin levels decrease due to bleaching, the skin becomes more vulnerable to harmful UV light. This could put many people at greater risk of sun damage and possible conditions such as melanoma.

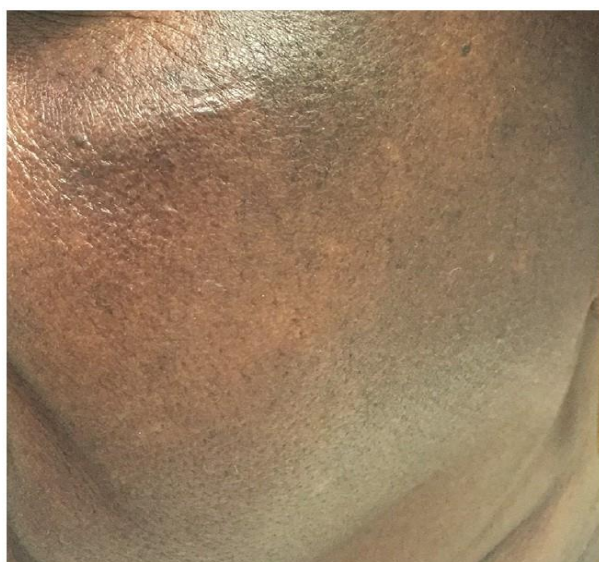


Figure 1: Exogenous ochronosis on the face of a woman with a history of hydroquinone use



Figure 2: Steroid acne on the chest after using a corticosteroid-containing bleaching cream for over one year.

Summary of a Case Study: Multiple Squamous Cell Carcinoma in a Patient Using Skin Bleaching Products in Togo

The long-term use of SLP can lead to the skin cancer. One case was reported in Togo. A 65-year-old female, use of skin bleaching products for 30 years, represented with a neck tumour evolving over 2 years at dermatological consultation. No personal or familial cancer history existed. During clinical examination revealed multiple ulcerative and cauliflower-like tumours on the neck, along with stretch marks, skin atrophy, and ochronosis elsewhere on the skin. Histological result from tumour biopsy confirmed invasive skin squamous cell carcinoma. Long term, regular use of SLP containing hydroquinone and potent corticosteroids on the whole body and face for 30 years :

- Led to the development of invasive cutaneous squamous cell carcinoma, a type of skin cancer.
- The cancer had spread to the lungs (pulmonary metastases), as diagnosed by further medical examinations.
- The evidence in this case highlights the potential risks associated with prolonged use of SLP and skin cancer.

MERCURY EXPOSURE IMPACTS HEALTH

Eating contaminated
fish and shellfish...

Using certain skin
lightening soaps and
creams...

Mercury is used
in small-scale
gold mining...

Is toxic to the
brain and affects
brain development
in unborn babies
and young
children.

Is toxic to
the kidneys.

This form of
mercury is toxic to the
brain and kidneys.

The same applies to
mercury fumes from
broken thermometers and
blood pressure devices.



World Health
Organization

Figure 3: Skin bleaching with high mercury level SLP is one the mercury exposures which has negative impacts on health

Response to skin-bleaching

- **Education and awareness:** Consumers need specific education to understand the correct use of skin care products and how to avoid harmful products. Healthcare professionals, including pharmacists, need to be educated about local skin bleaching practices and the potential complications associated with the misuse of products containing corticosteroids and hydroquinone. This knowledge helps will help them to identify adverse effects, provide advice and suggest safe alternatives such as high quality and affordable sunscreens.
- **Challenges in awareness:** Despite knowing the side effects of skin bleaching, people still choose to bleach their skin. This evidence strongly suggests that comprehensive public health awareness strategies are needed to discourage this practice.
- **Advocating for change:** Public health strategies and programmes need to discourage the culture of colourism by advocating that all skin colours have their own beauty and using more dark-skinned models in commercials. Skin bleaching is an important public health issue that requires broader campaigns that go beyond informing people about the health risks involved.
- **Regulatory action and challenges:** In some countries, WHO has declared skin bleaching a public health concern and banned products containing hydroquinone and harmful substances. However, these products remain available off-market and online, indicating the challenges in regulating their sale and distribution.

WHO response to mercury exposure

- **Based on the World Health Assembly Resolution 67.11 (2014)**, concerning “Public health impacts of exposure to mercury and mercury compounds: the role of WHO and ministries of public health in the implementation of the Minamata Convention”, WHO facilitate, provide technical support to countries. Specifically, **Article 4** of the Minamata Convention mandates all Convention Parties to prohibit the production, import, or export of cosmetics, such as skin lightening soaps and creams, containing mercury levels surpassing 1ppm. It aims to guide countries in preventing the circulation of such products in the market.
- Recently, Gabon, Jamaica, and Sri Lanka have collaborated to address the environmental and health issues linked with the skin lightening industry. A joint initiative of US\$14 million aims to implement a comprehensive strategy to eradicate mercury from skin lightening products and promote the beauty of all skin tones.



Figure 4: the brief about Minamata convention protecting environment and people from mercury

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Sources

Production of the factsheet was supported by the Integrated African Health Observatory.

Photography: Poster board of skin-lightening products purchased at the market and used during surveys to assist in answering the question “What skin-lightening products have you used/are using?” (source: Yusuf MA, Mahmoud ND, Rirash FR, Stoff BK, Liu Y, McMichael JR. Skin lightening practices, beliefs, and self-reported adverse effects among female health science students in Borama, Somaliland: A cross-sectional survey. *Int J Womens Dermatol*. 2019;5(5):349–55)

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